FIG. 1

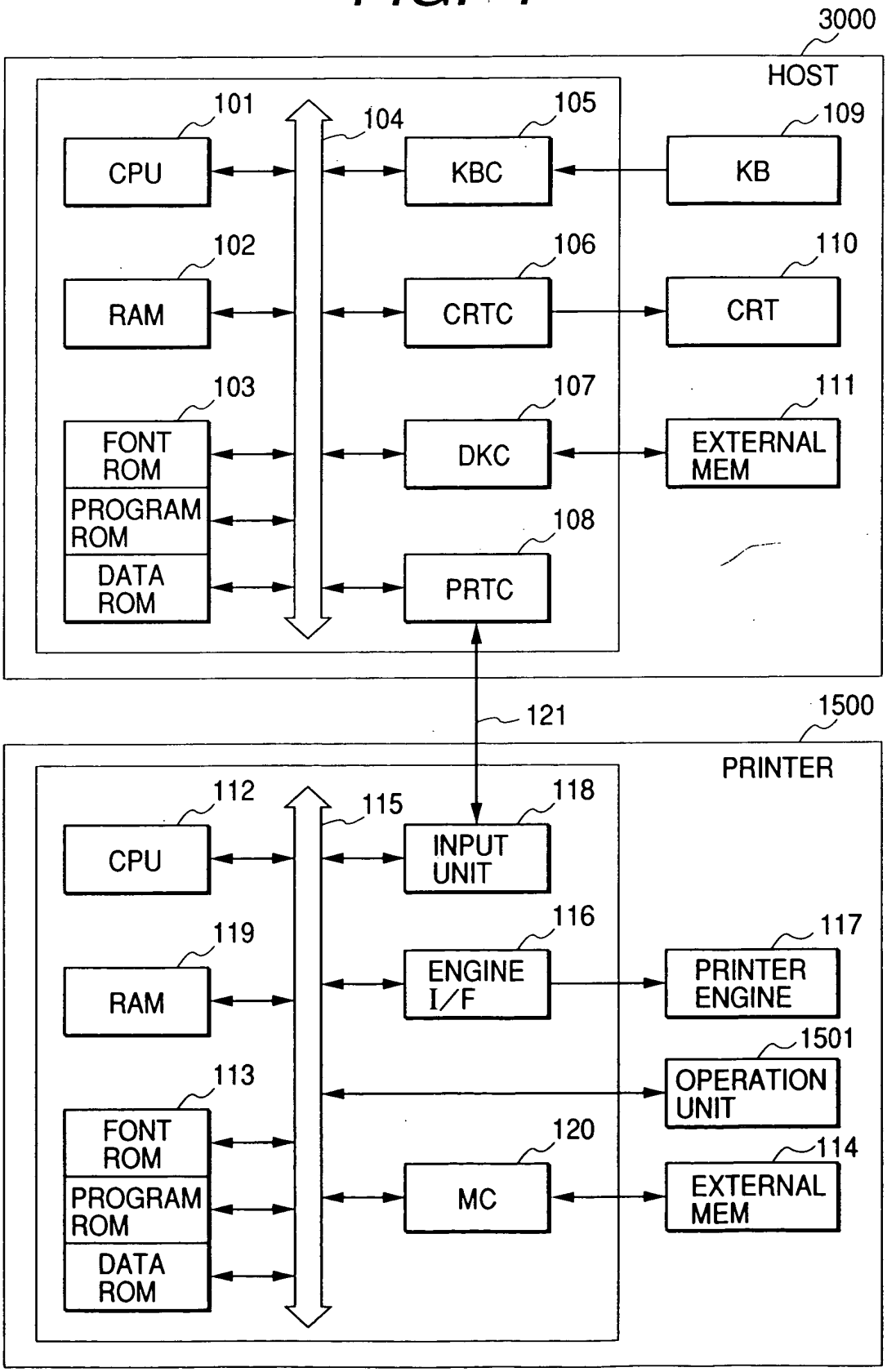
3000
HOST
101
CPU
104
105
KBC
109
KB
102
RAM
106
CRTC
110
CRT
103
FONT ROM
PROGRAM ROM
DATA ROM
107
DKC
111
EXTERNAL MEM
108
PRTC
121
1500
PRINTER
112
CPU
115
118
INPUT UNIT
119
RAM
116
ENGINE I/F
117
PRINTER ENGINE
1501
OPERATION UNIT
113
FONT ROM
PROGRAM ROM
DATA ROM
120
MC
114
EXTERNAL MEM

FIG. 2

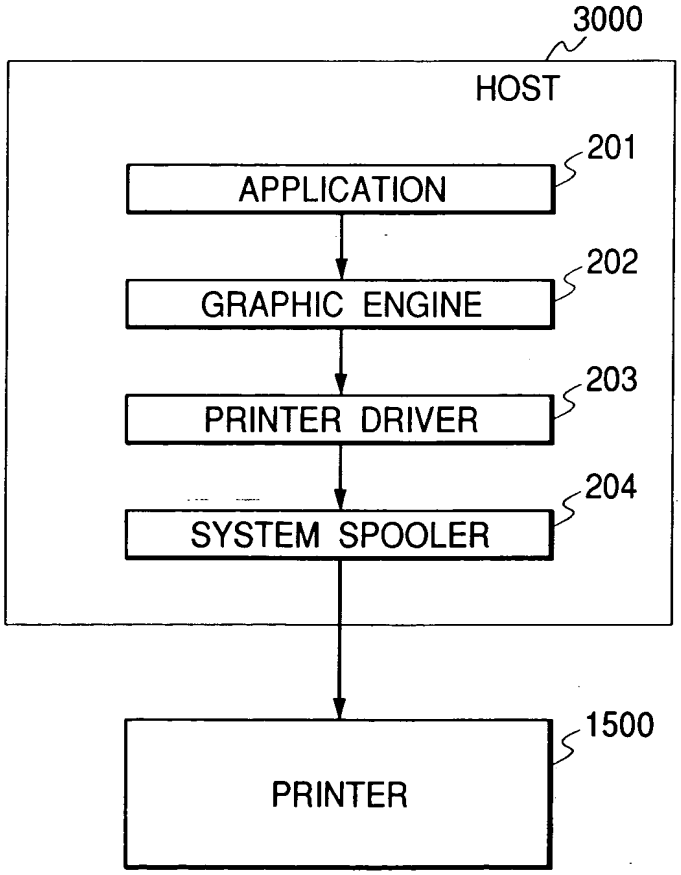
3000
HOST
201
APPLICATION
202
GRAPHIC ENGINE
203
PRINTER DRIVER
204
SYSTEM SPOOLER
1500
PRINTER

FIG. 3

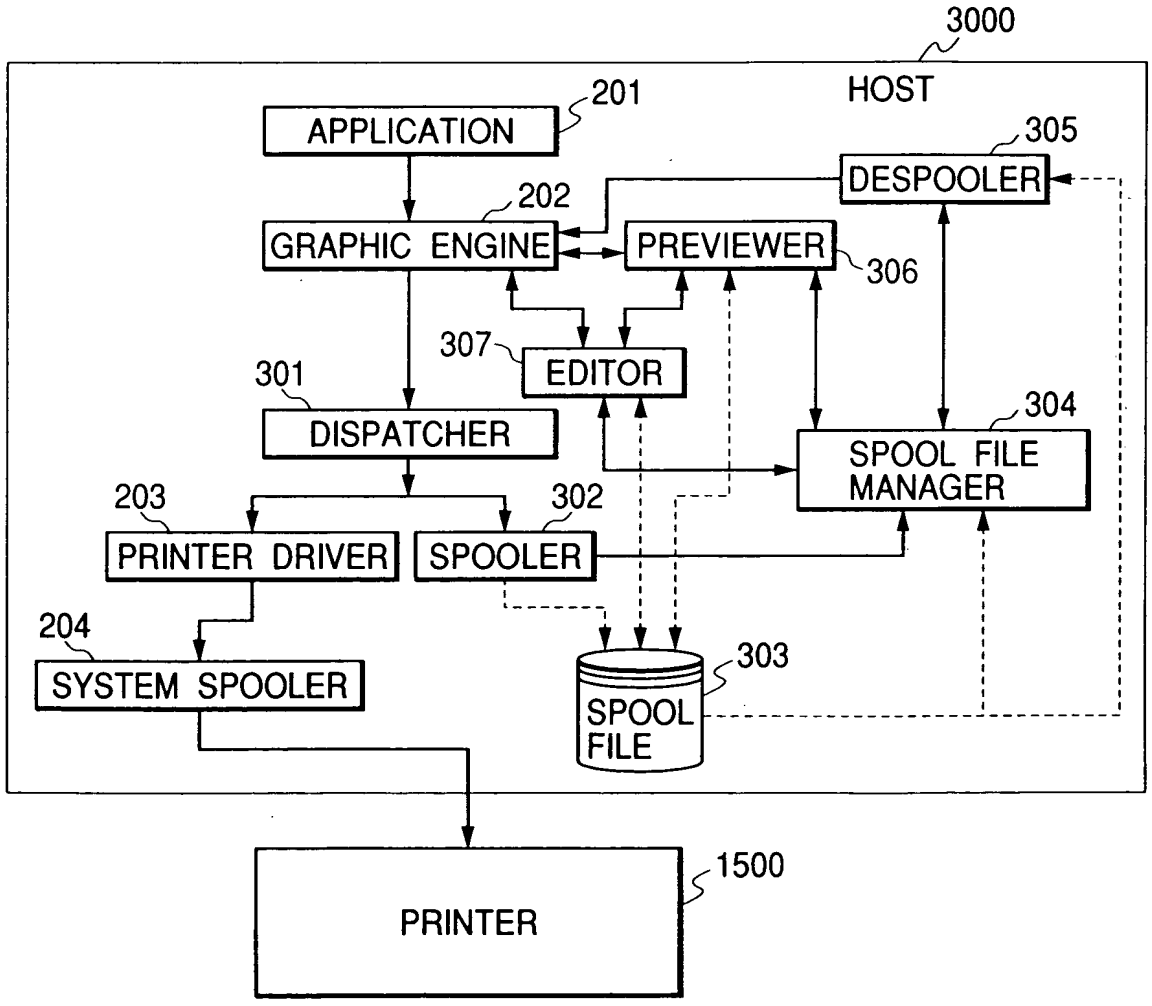
3000
HOST
201
APPLICATION
305
DESPOOLER
202
GRAPHIC ENGINE
PREVIEWER
306
307
EDITOR
301
DISPATCHER
304
SPOOL FILE MANAGER
203
302
PRINTER DRIVER
SPOOLER
204
303
SYSTEM SPOOLER
SPOOL FILE
1500
PRINTER

FIG. 4

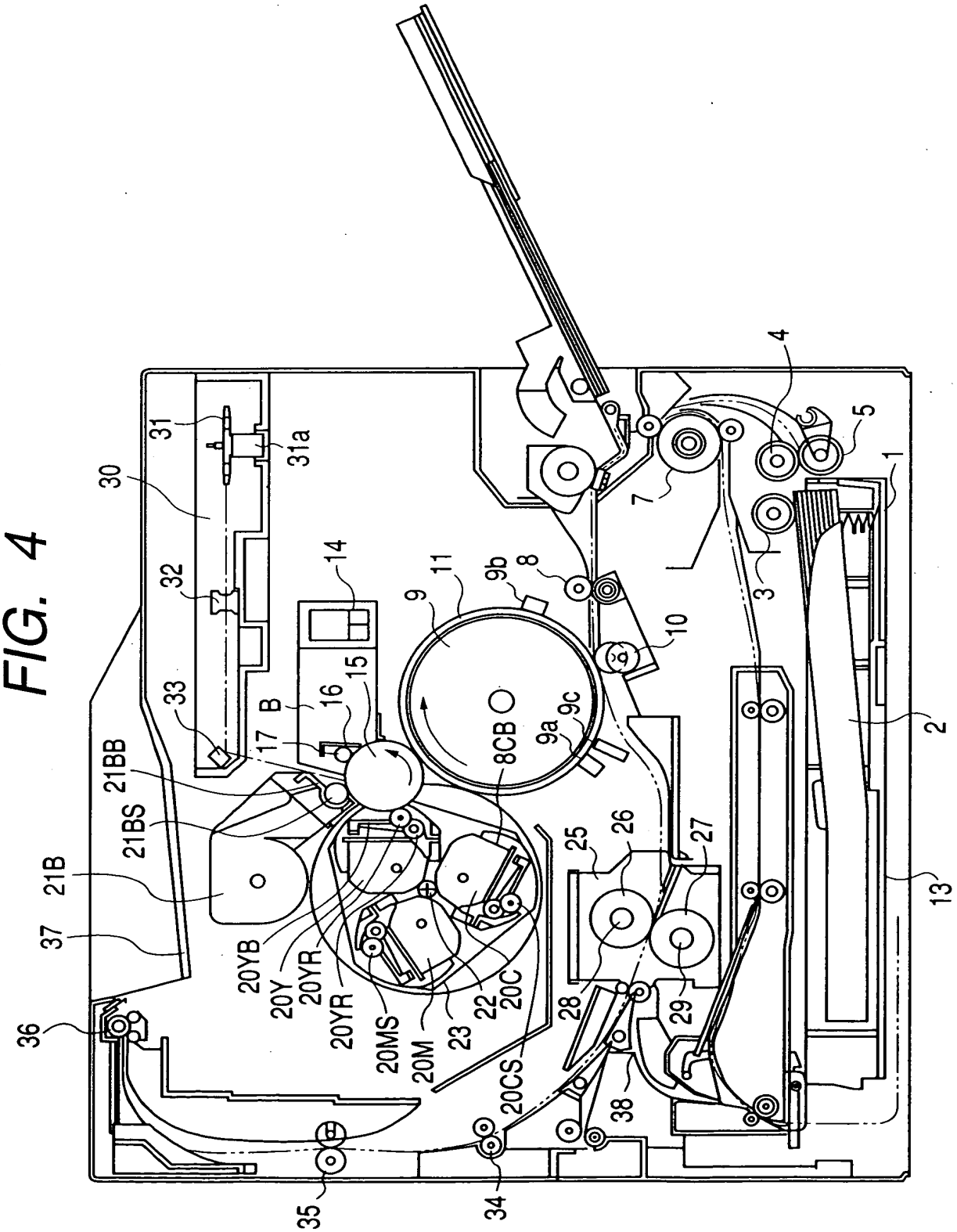
1
2
3
4
5
7
8
9
9a
9b
9c
10
11
13
14
15
16
17
B
8CB
20Y
20YB
20YR
20M
20MS
20C
20CS
21B
21BB
21BS
22
23
25
26
27
28
29
30
31
31a
32
33
34
35
36
37
38

FIG. 5

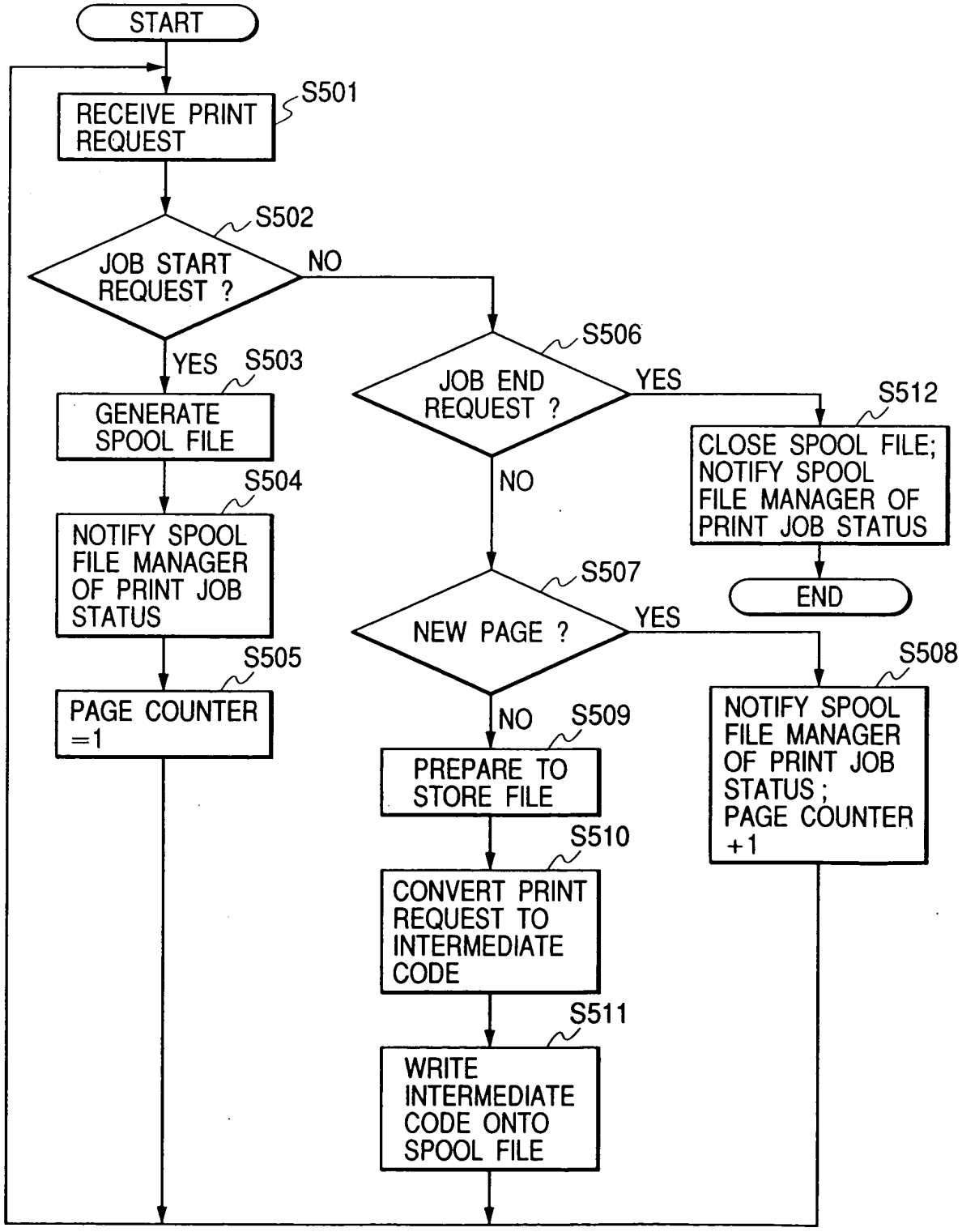
START
RECEIVE PRINT REQUEST
S501
JOB START REQUEST ?
S502
NO
YES
S503
GENERATE SPOOL FILE
S504
NOTIFY SPOOL FILE MANAGER OF PRINT JOB STATUS
S505
PAGE COUNTER =1
JOB END REQUEST ?
S506
YES
NO
CLOSE SPOOL FILE; NOTIFY SPOOL FILE MANAGER OF PRINT JOB STATUS
S512
END
NEW PAGE ?
S507
YES
NO
S509
PREPARE TO STORE FILE
S510
CONVERT PRINT REQUEST TO INTERMEDIATE CODE
S511
WRITE INTERMEDIATE CODE ONTO SPOOL FILE
NOTIFY SPOOL FILE MANAGER OF PRINT JOB STATUS ; PAGE COUNTER +1
S508

FIG. 6

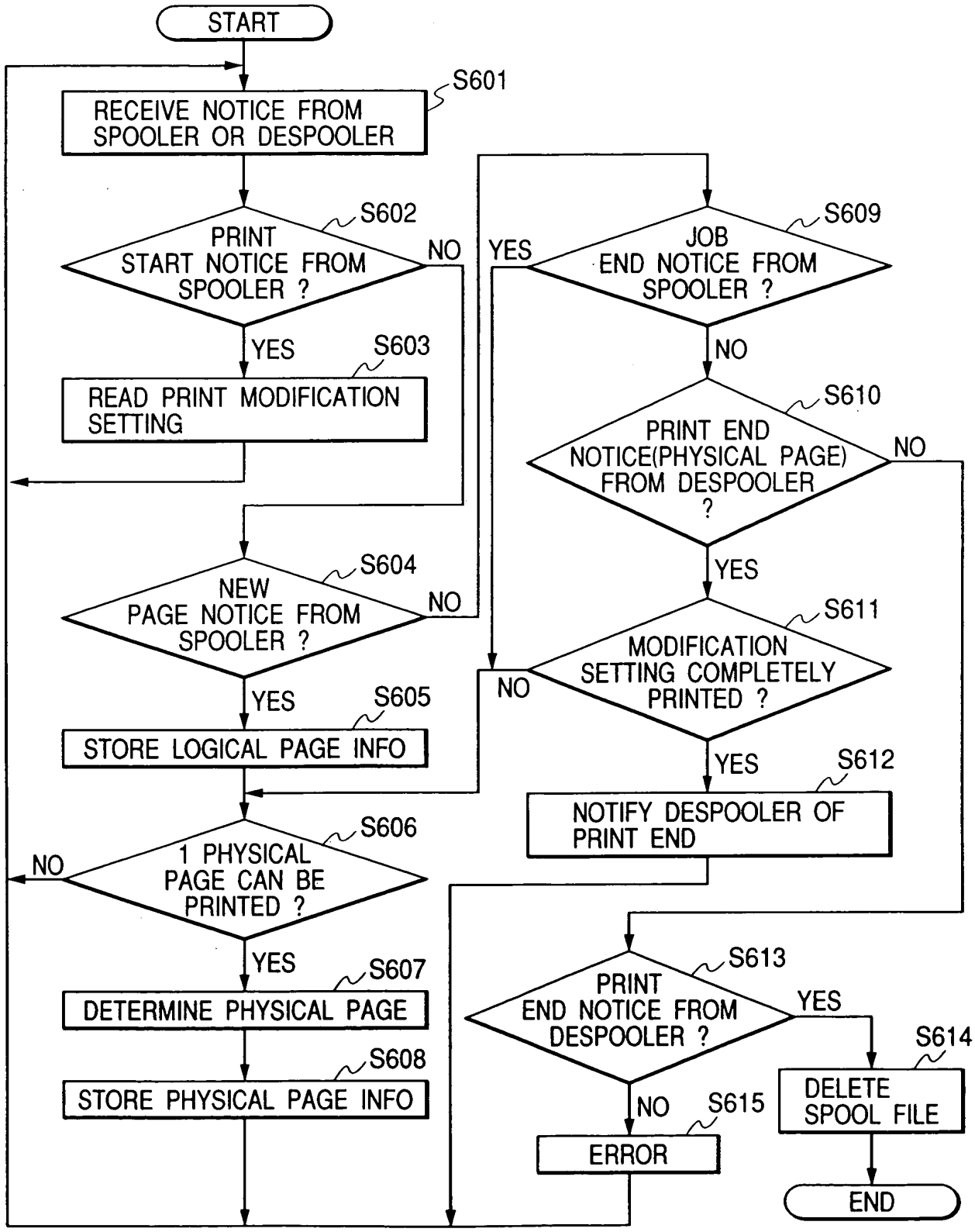
START
S601
RECEIVE NOTICE FROM SPOOLER OR DESPOOLER
S602
PRINT START NOTICE FROM SPOOLER ?
NO
YES
S603
READ PRINT MODIFICATION SETTING
S604
NEW PAGE NOTICE FROM SPOOLER ?
NO
YES
S605
STORE LOGICAL PAGE INFO
S606
1 PHYSICAL PAGE CAN BE PRINTED ?
NO
YES
S607
DETERMINE PHYSICAL PAGE
S608
STORE PHYSICAL PAGE INFO
S609
JOB END NOTICE FROM SPOOLER ?
YES
NO
S610
PRINT END NOTICE(PHYSICAL PAGE) FROM DESPOOLER ?
NO
YES
S611
MODIFICATION SETTING COMPLETELY PRINTED ?
NO
YES
S612
NOTIFY DESPOOLER OF PRINT END
S613
PRINT END NOTICE FROM DESPOOLER ?
YES
NO
S614
DELETE SPOOL FILE
S615
ERROR
END

FIG. 7

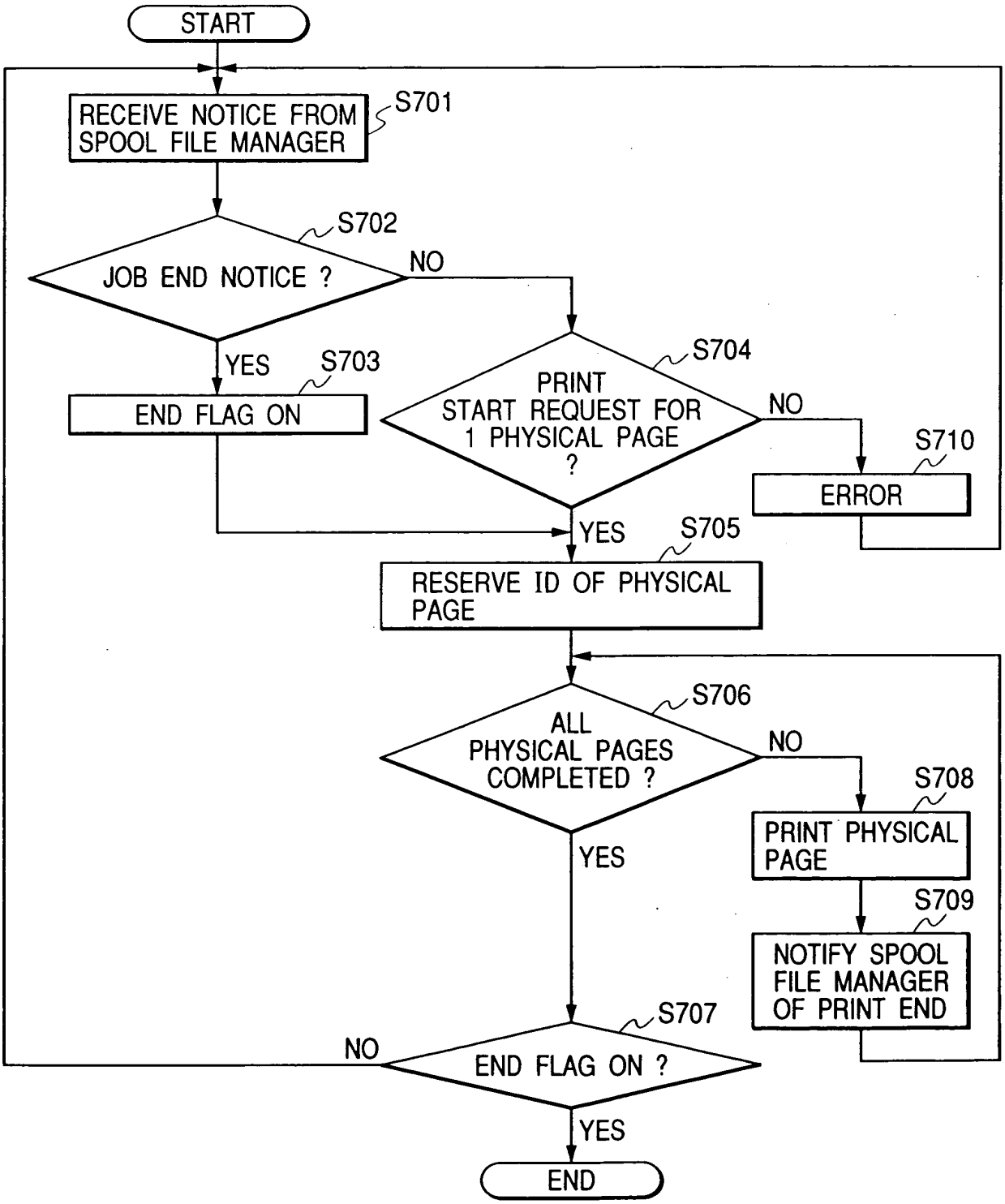
START
RECEIVE NOTICE FROM SPOOL FILE MANAGER
S701
JOB END NOTICE ?
S702
NO
YES
END FLAG ON
S703
PRINT START REQUEST FOR 1 PHYSICAL PAGE ?
S704
NO
ERROR
S710
YES
RESERVE ID OF PHYSICAL PAGE
S705
ALL PHYSICAL PAGES COMPLETED ?
S706
NO
PRINT PHYSICAL PAGE
S708
YES
NOTIFY SPOOL FILE MANAGER OF PRINT END
S709
END FLAG ON ?
S707
NO
YES
END

FIG. 8

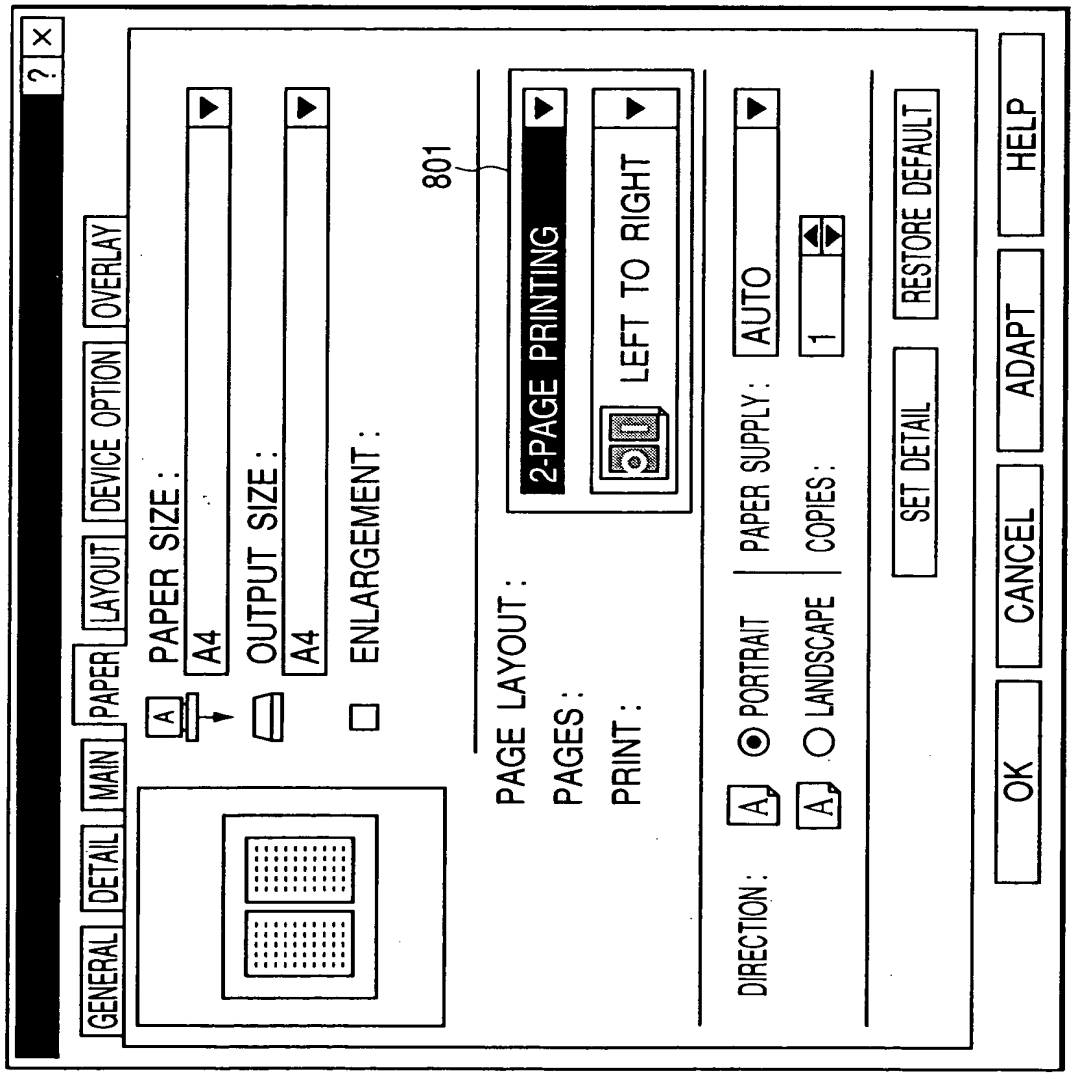
?
GENERAL
DETAIL
MAIN
PAPER
LAYOUT
DEVICE OPTION
OVERLAY
PAPER SIZE :
A4
OUTPUT SIZE :
A4
ENLARGEMENT :
801
PAGE LAYOUT :
2-PAGE PRINTING
PAGES :
PRINT :
LEFT TO RIGHT
DIRECTION :
PORTRAIT
LANDSCAPE
PAPER SUPPLY :
AUTO
COPIES :
1
SET DETAIL
RESTORE DEFAULT
OK
CANCEL
ADAPT
HELP

FIG. 9

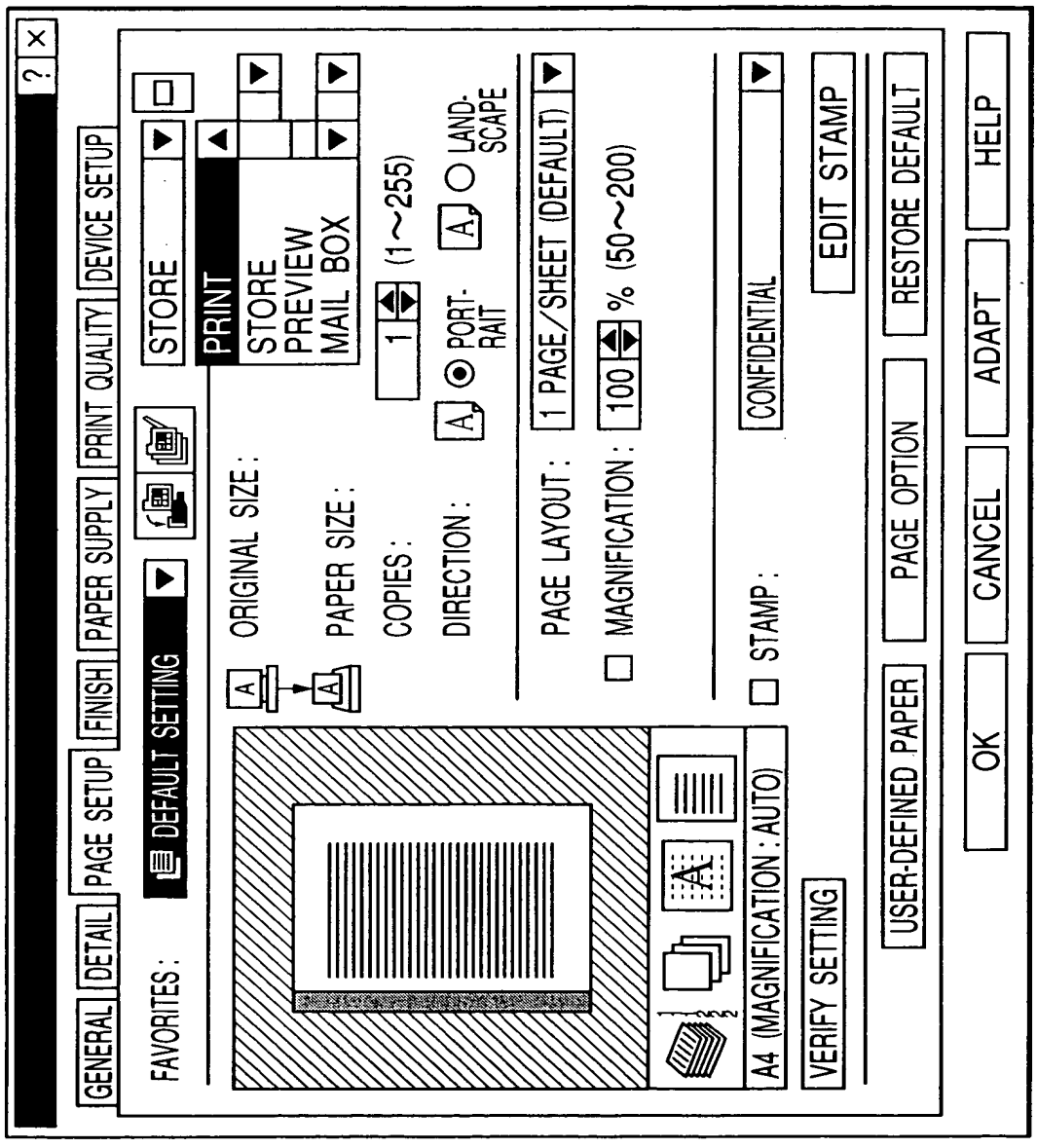
GENERAL
DETAIL
PAGE SETUP
FINISH
PAPER SUPPLY
PRINT QUALITY
DEVICE SETUP
FAVORITES:
DEFAULT SETTING
STORE
PRINT
STORE
PREVIEW
MAIL BOX
ORIGINAL SIZE:
PAPER SIZE:
COPIES:
1
(1~255)
DIRECTION:
PORT-RAIT
LAND-SCAPE
PAGE LAYOUT:
1 PAGE/SHEET (DEFAULT)
MAGNIFICATION:
100
% (50~200)
STAMP:
CONFIDENTIAL
EDIT STAMP
A4 (MAGNIFICATION:AUTO)
VERIFY SETTING
USER-DEFINED PAPER
PAGE OPTION
RESTORE DEFAULT
OK
CANCEL
ADAPT
HELP

FIG. 10

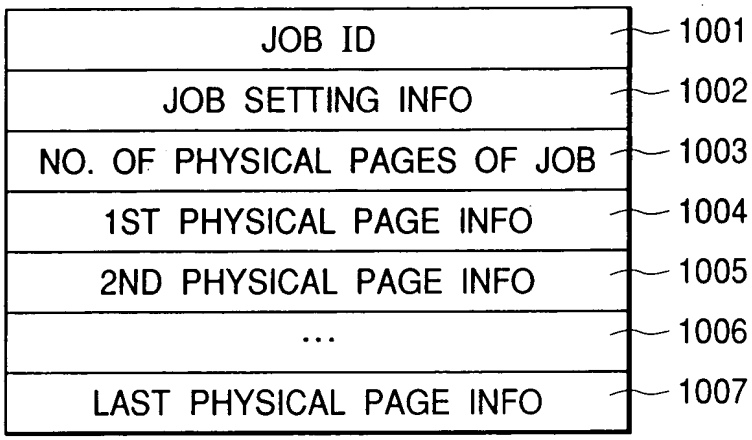
JOB ID
1001
JOB SETTING INFO
1002
NO. OF PHYSICAL PAGES OF JOB
1003
1ST PHYSICAL PAGE INFO
1004
2ND PHYSICAL PAGE INFO
1005
...
1006
LAST PHYSICAL PAGE INFO
1007

FIG. 11

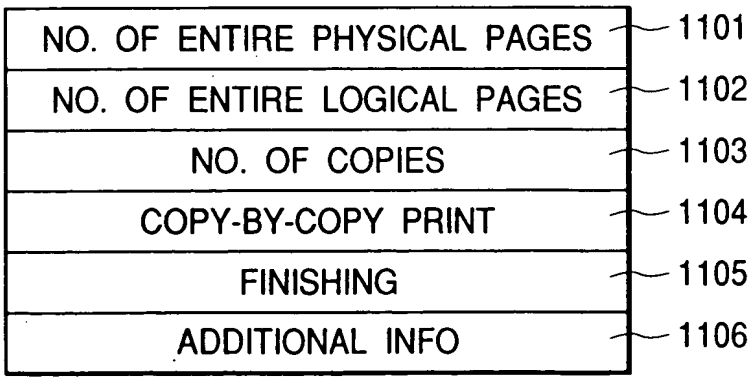
NO. OF ENTIRE PHYSICAL PAGES
1101
NO. OF ENTIRE LOGICAL PAGES
1102
NO. OF COPIES
1103
COPY-BY-COPY PRINT
1104
FINISHING
1105
ADDITIONAL INFO
1106

FIG. 12

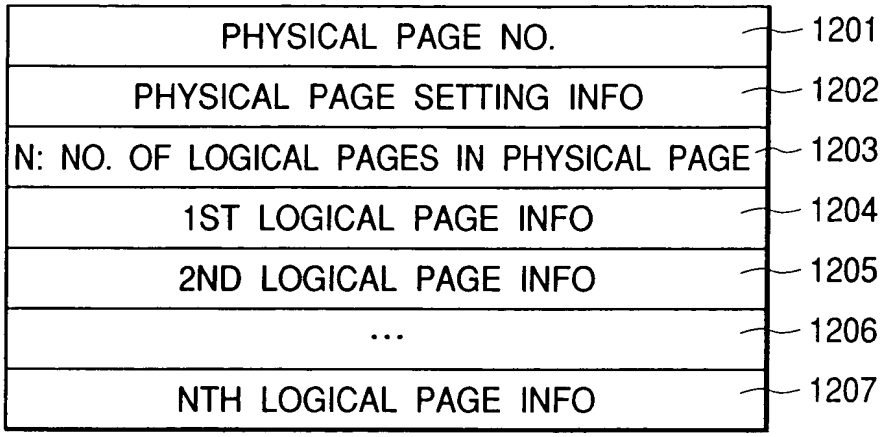

FIG. 13

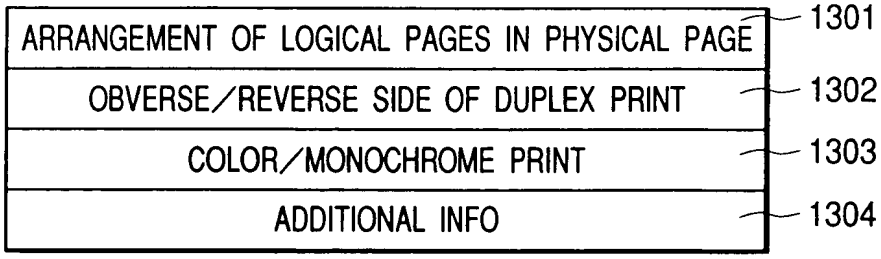

FIG. 14

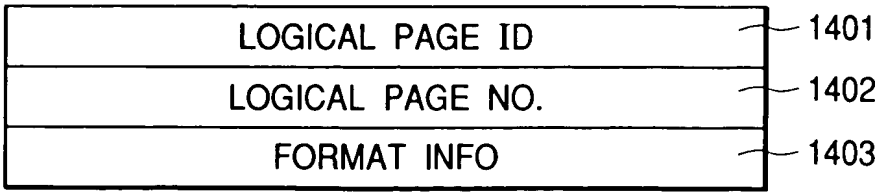

FIG. 15

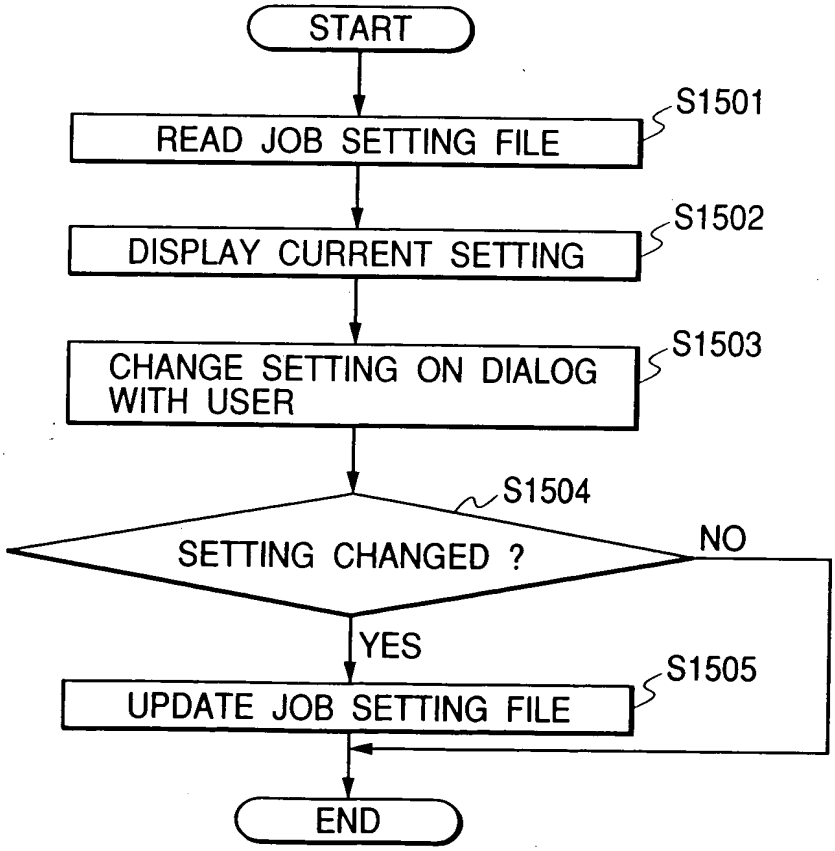
START
READ JOB SETTING FILE
S1501
DISPLAY CURRENT SETTING
S1502
CHANGE SETTING ON DIALOG WITH USER
S1503
S1504
SETTING CHANGED ?
NO
YES
UPDATE JOB SETTING FILE
S1505
END

FIG. 16

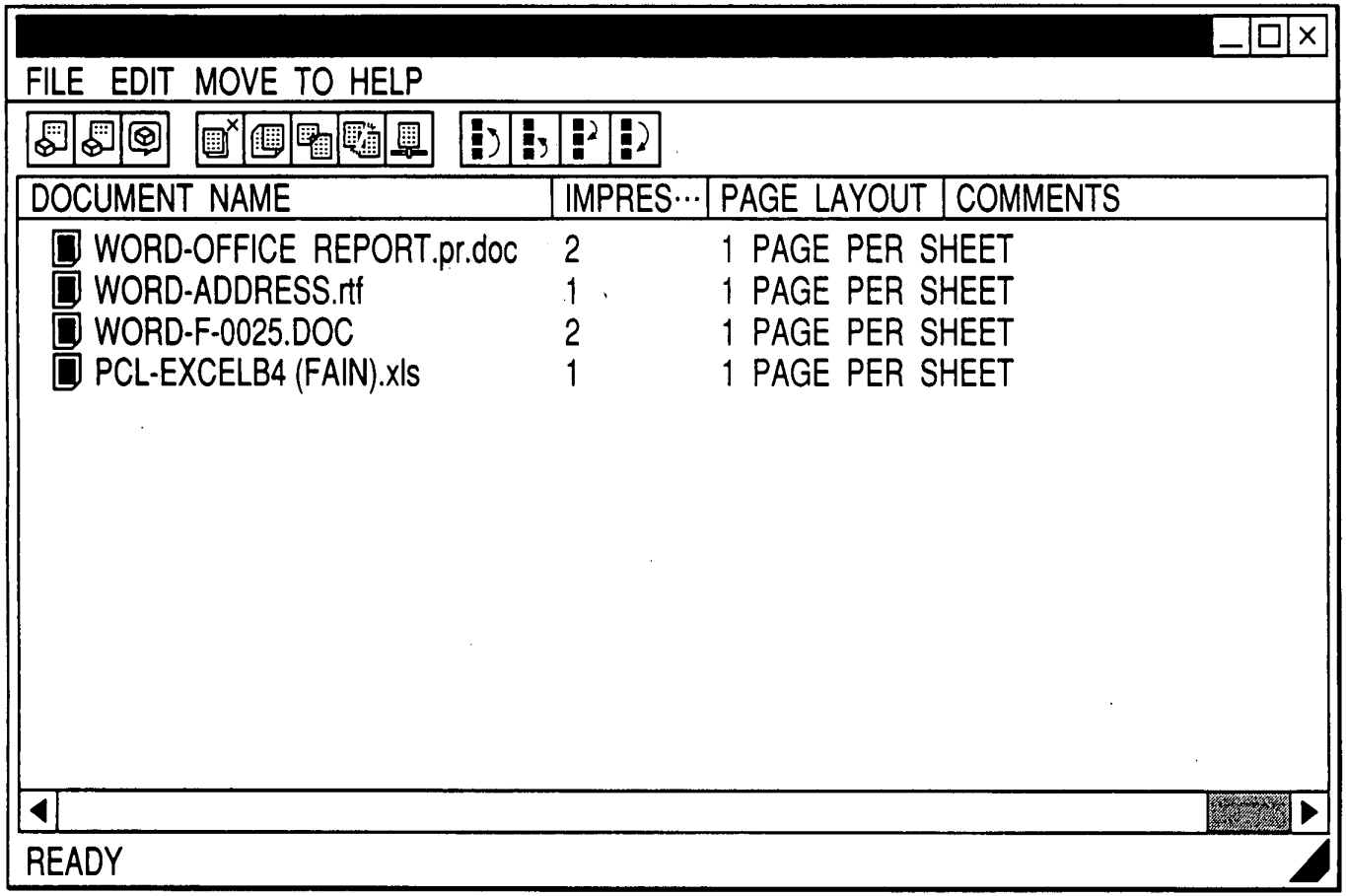
FILE EDIT MOVE TO HELP
DOCUMENT NAME
IMPRES···
PAGE LAYOUT
COMMENTS
WORD-OFFICE REPORT.pr.doc 2 1 PAGE PER SHEET
WORD-ADDRESS.rtf 1 1 PAGE PER SHEET
WORD-F-0025.DOC 2 1 PAGE PER SHEET
PCL-EXCELB4 (FAIN).xls 1 1 PAGE PER SHEET
READY

FIG. 17

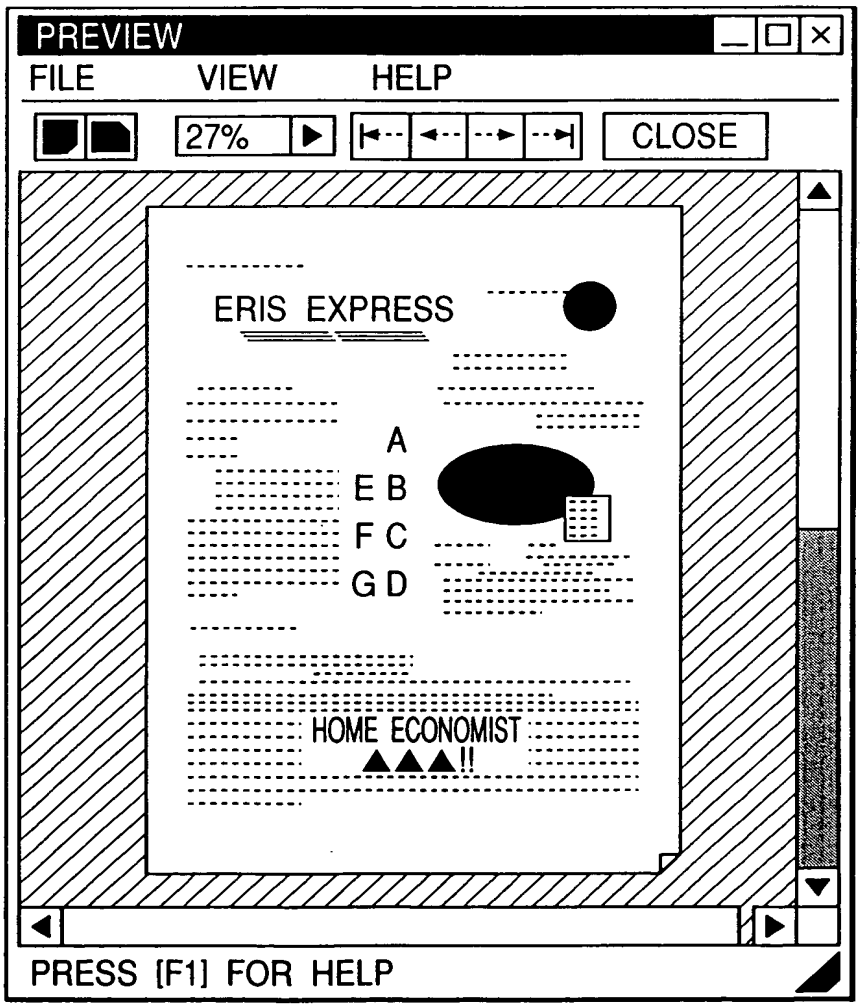
PREVIEW
FILE
VIEW
HELP
27%
CLOSE
ERIS EXPRESS
A
E B
F C
G D
HOME ECONOMIST
▲▲▲!!
PRESS [F1] FOR HELP

FIG. 18

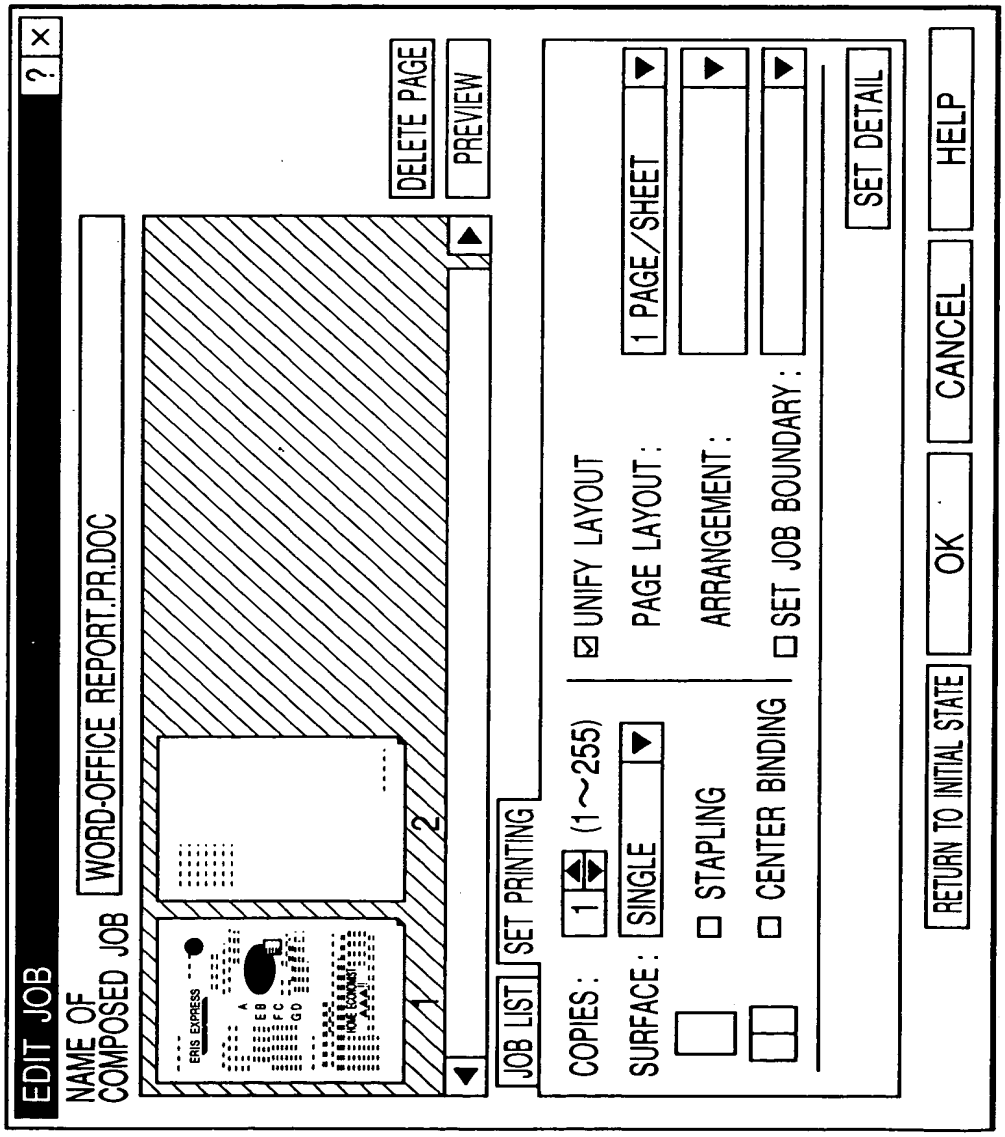
EDIT JOB
NAME OF COMPOSED JOB
WORD-OFFICE REPORT.PR.DOC
DELETE PAGE
PREVIEW
JOB LIST
SET PRINTING
COPIES:
(1～255)
SURFACE:
SINGLE
STAPLING
CENTER BINDING
UNIFY LAYOUT
PAGE LAYOUT:
1 PAGE/SHEET
ARRANGEMENT:
SET JOB BOUNDARY:
SET DETAIL
RETURN TO INITIAL STATE
OK
CANCEL
HELP

FIG. 19

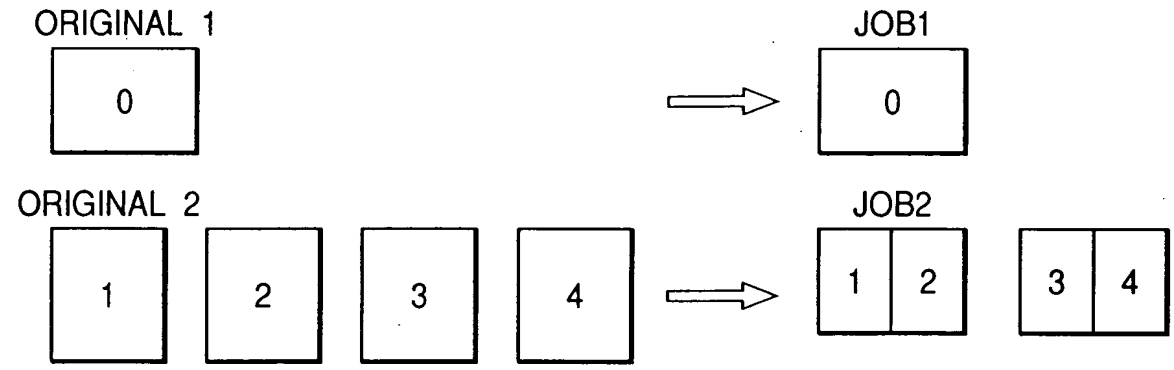
ORIGINAL 1
0
JOB1
0
ORIGINAL 2
1
2
3
4
JOB2
1
2
3
4

FIG. 20

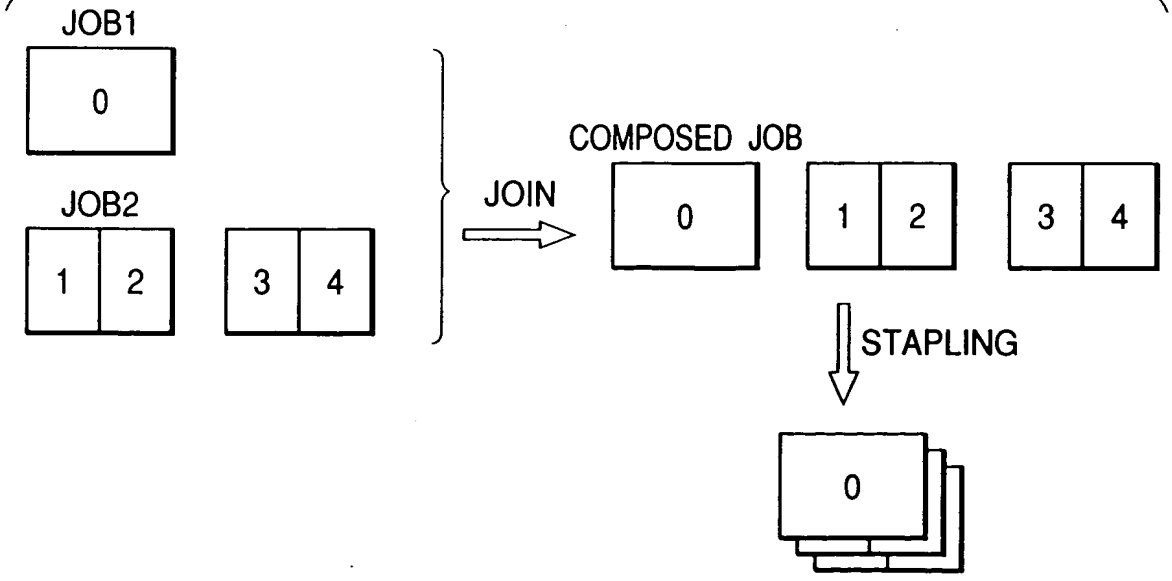
JOB1
0
JOB2
1
2
3
4
JOIN
COMPOSED JOB
0
1
2
3
4
STAPLING
0

FIG. 21A

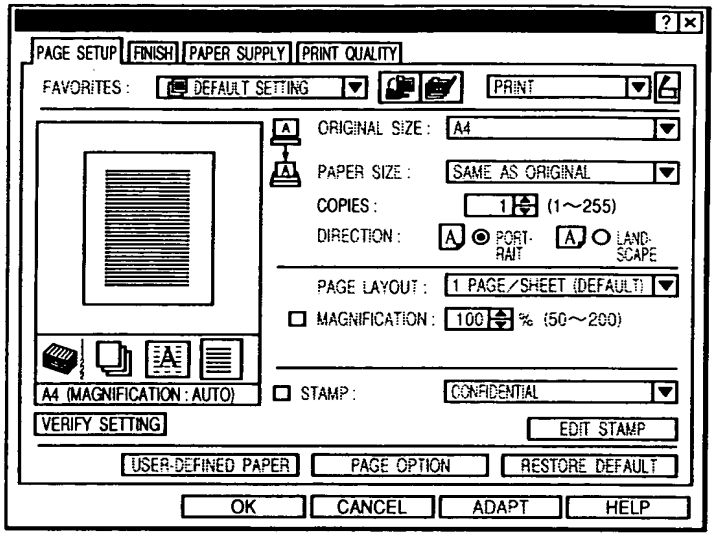

FIG. 21B

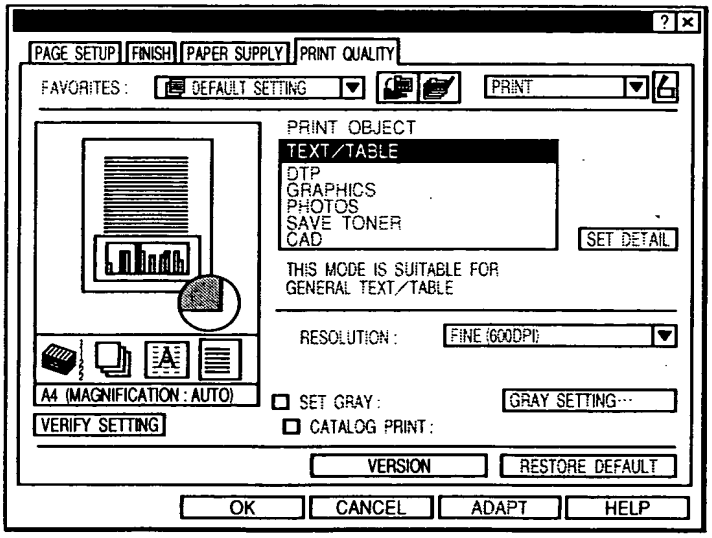

FIG. 21C

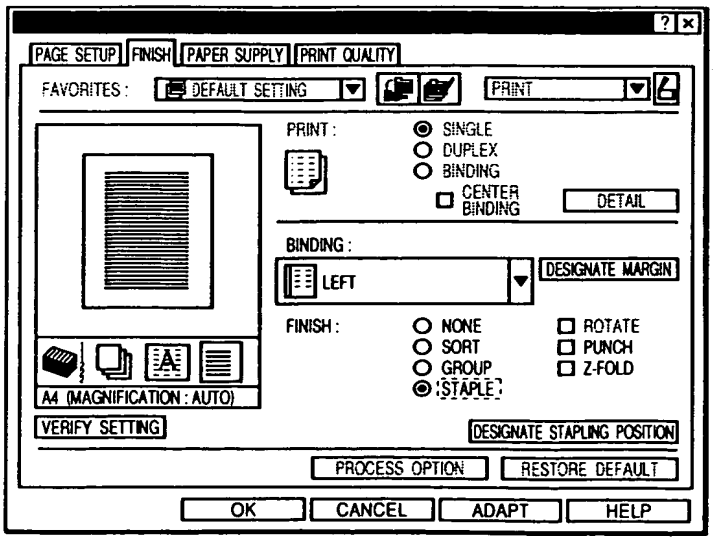

FIG. 22

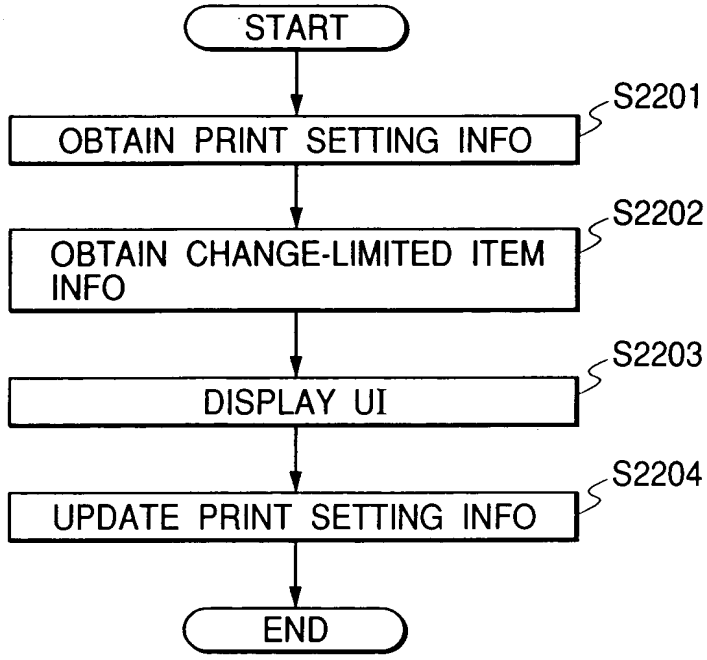

FIG. 23

CHANGE-LIMITED ITEM INFO
0 : NONE
1 : LAYOUT
2 : QUALITY
4 : .....

FIG. 24

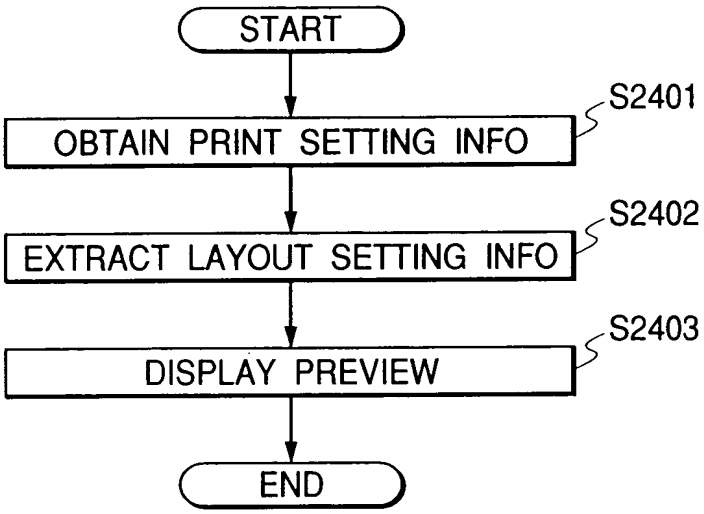

FIG. 25

API GETLAYOUT INFO (IMODE, PDEVMODE, PINFO)	
IMODE :	DESIGNATE PROCESSING MODE 1 : LAYOUT IN HOST 2 : LAYOUT IN PRINTER
PDEVMODE :	POINTER TO PRINT SETTING INFO
PINFO :	POINTER TO LAYOUT INFO